NON-PUBLIC?: N
ACCESSION #: 8907170103
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Millstone Nuclear Power Station Unit 1 PAGE: 1 OF 3

DOCKET NUMBER: 05000245

TITLE: Loss of Normal Power While Switching Reserve Station Service Transformer
EVENT DATE: 04/29/89 LER #: 89-012-01 REPORT DATE: 07/05/89

OPERATING MODE: R POWER LEVEL: 000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: Eric A. Bennett, Engineer, Extension 4195 TELEPHONE: 203 447-1791

COMPONENT FAILURE DESCRIPTION:
CAUSE: B SYSTEM: FK COMPONENT: 27 MANUFACTURER: G080
REPORTABLE TO NPRDS:

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On April 29, 1989 at 0515 while switching out the Reserve Station Service Transformer (15G-21S) for scheduled maintenance and testing, a Loss of Normal Power (LNP) occurred. Prior to deenergizing the Reserve Station Service Transformer (15G-21S), station service had been shifted to the Normal Station Service Transformer (15G-15), which was being supplied from the backfed Generator Step Up Transformer (15G-1X). The Emergency Diesel Generator automatically started and picked up Bus 14F and the Emergency Station Service Transformer was closed on to Buses 14C and 14E. At the time of the event, the unit was in cold shutdown for refueling and no core alterations were in progress. Operations department personnel carried out the applicable sections of ONP 503B, "Loss of All Station AC Power (LNP)."

END OF ABSTRACT

I. Description of Event

On April 29, 1989 at 0515 while switching out the Reserve Station Service Transformer (15G-21S) for scheduled maintenance and testing, a Loss of Normal Power (LNP) occurred when the transformer was deenergized from the 345KV switchyard.

Prior to the deenergizing the Reserve Station Service Transformer, all station electrical service had been shifted to the Normal Station Service Transformer (15G-1S) which was being supplied from the backfed Generator Step Up Transformer (15G-1X). All of the Reserve Station Service Transformer bus supply breakers had been opened and racked down.

The Emergency Diesel Generator automatically started and picked up Bus 14F and the Emergency, Station Service Transformer was closed on to Buses 14C and 14E by Operations. The operators recognized that power was still available from the Normal Station Service Transformer and with Test Department personnel, defeated the Station Undervoltage Load Shed scheme allowing normal restoration of station service from the Normal Station Service Transformer. At no time during the event was offsite power not available from the Normal Station Service Transformer.

At the time of the event, the unit was in cold shutdown for refueling and no core alterations were in progress. Operations department personnel carried out the applicable sections of ONP 503B, Loss of All Station AC Power (LNP)."

II. Cause of Event

During the refuel outage extensive modifications are being made on the Station Undervoltage/Load Shed Initiation scheme. This requires the implementation of major logic changes to the scheme while still maintaining its servicability. One part of the modifications required the auxiliary relaying from the Reserve Station Service Transformer Undervoltage/Load Shed Scheme to be transferred to the overall Station Undervoltage/Load Shed scheme. As part of the cutover plan, one division of the Station Undervoltage/Load Shed scheme was modified including the addition of the contact from a Reserve Station Service Transformer Undervoltage/Load Shed auxiliary relay (94X2/STA). However, the coil remained in the Reserve Station Service Transformer Undervoltage/Load Shed logic, this scheme was scheduled to be modified during the Reserve Station Service Transformer maintenance outage. As the relay coil and its contacts appeared on separate prints and were assigned different nonenclature reflecting both the before (94X2/STA) and after (27X-l/S2) configuration, it was not clear or immediately apparent during the modification that the coil was still in the Reserve Station Service Transformer Undervoltage/Load Shed logic.

Prior to returning the modified section of the Station Undervoltage/Load Shed scheme to service, a test was completed to ensure its operability. Since the modifications to the overall scheme were not complete the test was only designed to ensure operability of the original scheme. The final integrated tests ensuring the operability of the entire scheme are scheduled upon completion of the project.

When the Reserve Station Service Transformer was deenergized the Reserve Station Service Transformer Undervoltage/Load Shed scheme operated, energizing the auxiliary relay, closing the relay contact that had been brought over to the Station Undervoltage/Load Shed scheme resulting in the Loss of Normal Power.

III. Analysis of Event

This event is reportable under 10CFR50.73(a)(2)(iv).

All systems functioned as designed and the Station Service was restored to the Normal Station Service Transformer. There were no safety consequences as a result of the event.

The event was caused by the interim condition of the Station Undervoltage/Load Shed scheme during a major modification and not a design deficiency in the control scheme. The auxiliary relay coil was to be removed from the Reserve Station Service Transformer Undervoltage/Load Shed scheme as part of the ongoing modifications of the scheme during the period when the transformer was out of service for scheduled maintenance and test.

The test plan was adequate. Had there not been a trip, the integrated test procedures were in place to ensure the design operability of the entire Undervoltage Load Shed scheme and would have identified any logic errors.

IV. Corrective Action

The Reserve Station Service Transformer Undervoltage/Load Shed scheme was modified in accordance with the new design including moving the auxiliary relay coil to the Station Undervoltage/Load Shed logic scheme.

We consider this to be an isolated case due to the magnitude of the project undertaken, while maintaining the servicability of the existing Station Undervoltage/Load Shed scheme. No further action is required.

V. Additional Information

There were no previous similar events.

ATTACHMENT 1 TO 8907170103 PAGE 1 OF 1

NORTHEAST UTILITIES General Offices Selden Street, Berlin Connecticut
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Holyoke Water Power Company
Northeast Utilities Service Company HARTFORD, CONNECTICUT 06414-0270
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July 5, 1989
MP-13268
Re: 10CFR50.73(a)(2)(iv)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Reference: Facility Operating License No. DPR-21
Docket No. 50-245
Licensee Event Report 89-012-01

Gentlemen:

This letter forwards Licensee Event Report 89-012-01 required to be submitted pursuant to 10CFR50.73(a)(2)(iv).

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Stephen E. Scace
Station Superintendent
Millstone Nuclear Power Station

SES/EAB:faj

Attachment: LER 89-012-01

cc: W. T. Russell, Region I
W. J. Raymond, Senior Resident Inspector

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